

FARS QUERY SYSTEM WORKBOOK:

QUERY WIZARD EXERCISES



What is the FARS Query Wizard?

An intricate part of the FARS Web Site, the Query Wizard enables users to manipulate pre- defined queries to search through FARS data. The Query Wizard is a quick and easy way for anyone to generate FARS statistical reports. Best of all, users can customize the reports to suit their needs. After deciding which year, state, county, or city to query, the user can then view the data in a number of formats. With the Query Wizard, FARS data is assessable to everyone.



How to Use the Query Wizard Workbook:

This workbook has been developed to aid users obtain pertinent FARS data. Each exercise in the workbook covers a different group of possible scenarios and options so that everyone, regardless of their 'Web Surfing' experience can feel comfortable using the Query Wizard. Use the Workbook to effortlessly glide through the Query Wizard and quickly get the information you need. To aid in the search, the following symbols appear throughout the workbook:

☞ The 'pointing finger' symbol instructs the user how to query data.



The 'note' symbol alerts the user to important information regarding the query.

Questions/Comments:

Questions and comments about the Query Wizard, or the FARS Web Site, should be directed to FARS.Webmaster@nhsta.dot.gov.

QUERY WIZARD



Example 1:

Accident Reports:





"Fatal Crashes by Roadway Function Class and Atmospheric Condition"

Year: 1996 **State:** NJ **County:** Bergen **City:** Paramus

Connect to Query Wizard:

1. To connect to the **Query Wizard** from the **FARS Home Page**:

➡ Click once on the hyperlink title "[Query Wizard](#)".

 What is FARS ? Describes the FARS program, when it started, who uses FARS data, currently available data sets, and other general information.	 Query FARS Data The FARS Query System provides interactive public access to fatality data through this web interface.
 FARS Contacts Information on who to contact if you are requesting data or other information.	 Query Wizard The FARS Query Wizard gives users the ability to use pre-defined queries to search through FARS data.




Figure 1: FARS Home Page link to Query Wizard Page.

2. On the **Query Wizard Page**, the **FARS Reports** are divided into 4 categories:

- ❖ **Accident Reports**
- ❖ **Vehicle Reports**
- ❖ **Driver Reports**
- ❖ **Fatality Reports**

Under each category are hyperlink titles of reports that connect to the **Report Query Page**.

3. To begin a query, click once on the hyperlink title of the report you want to review.
➡ Under "**Accident Reports**", click once on the hyperlink, "[Fatal Crashes by Roadway Function Class and Atmospheric Condition](#)" (See Figure 2, page 4).

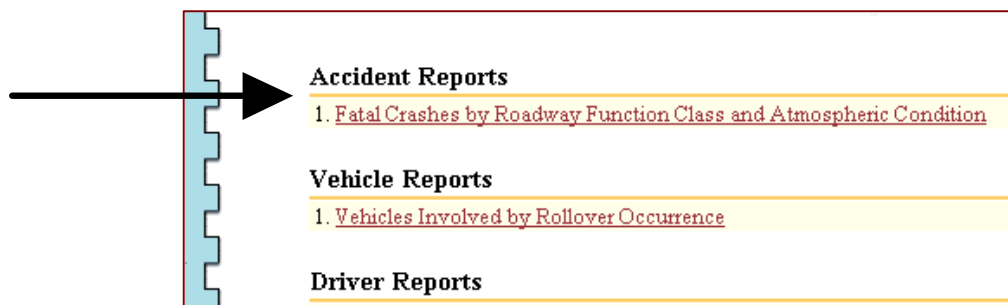


Figure 2: Link to “Fatal Crashes by Roadway Function Class and Atmospheric Condition”.

4. The Report Query Page is divided into two frames:

In the right frame are drop-down boxes with search criteria and radio buttons to select **Display Preferences**.

In the left frame is the title of the report, and where the queried data will appear.

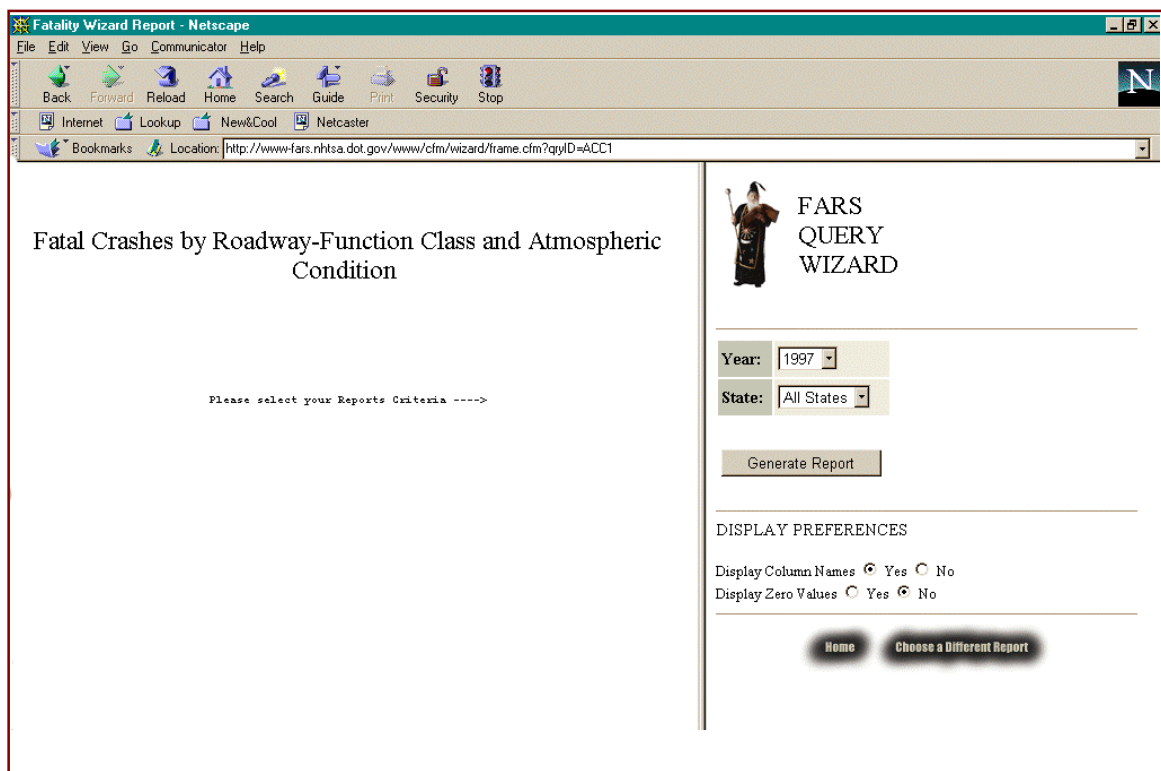


Figure 3: Report Query Page.

Select Year to Query:

5. Begin on the right side of the screen:

- Click once on the arrow of the first drop-down box.
- Scroll the year options.
- Click once on '1996'.



Note: At this time, only the years 1994, 1995, 1996, and 1997 can be queried.

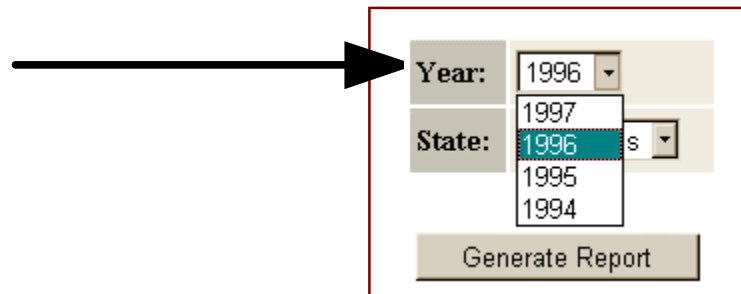


Figure 4: Click once on '1996'.

Select State to Query:

6. Select a state to query:

- Click once on the arrow of the second drop-down box.
- Scroll through the state options.
- Click once on 'NJ' for **New Jersey**.



Note: If an 'All States' query is chosen, no further drop-down boxes appear and you can skip to Step 9.

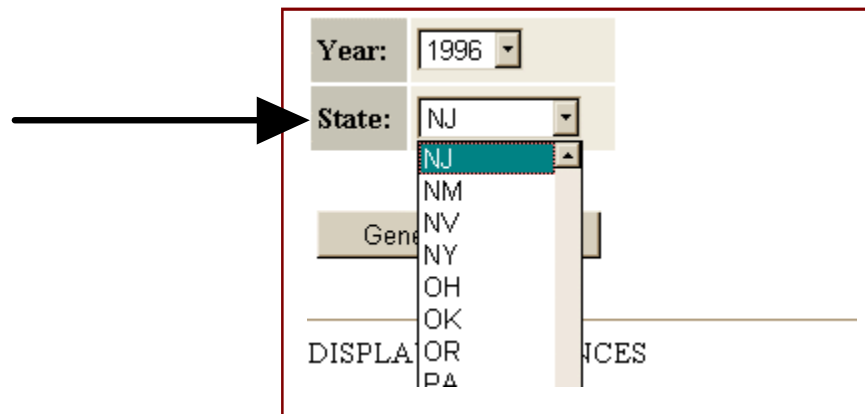


Figure 5: Click once on 'NJ'.

Select County to Query:

7. A third drop-down box with county choices will appear:
- Click once on the arrow of the third drop-down box.
 - Scroll through the county options.
 - Click once on '**Bergen(3)**'.



Note: If an 'All Counties' query is chosen, no further drop-down boxes appear and you can skip to Step 9.

Year: 1996

State: NJ

County: BERGEN(3)

City: BURLINGTON(5)
CAMDEN(7)
CAPE MAY(9)

Figure 6: Click once on 'Bergen(3)'.

Select City to Query:

8. A fourth, final drop-down box with city choices will appear:
- Click once on the arrow of the fourth drop-down box.
 - Scroll through the city options.
 - Click once on '**Paramus**'.

Year: 1996

State: NJ

County: BERGEN

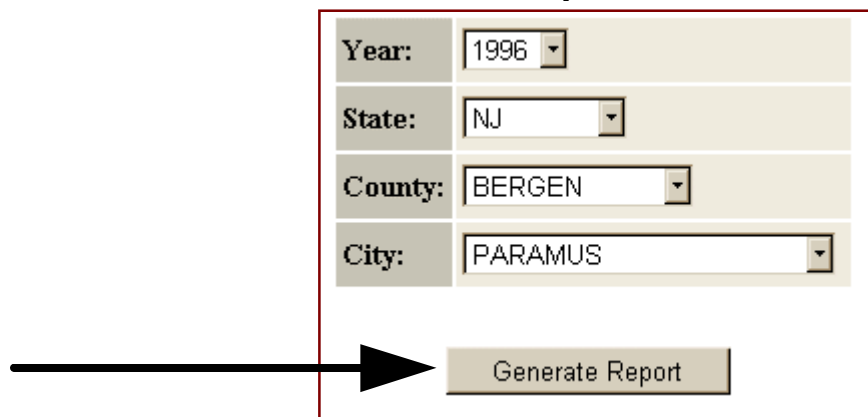
City: PARAMUS
PARK RIDGE
RAMSEY
RIDGEFIELD
RIDGEFIELD PARK
RIDGEWOOD

Figure 7: Click once on 'Paramus'.

Generate Report:

9. You are now ready to generate the report:

➡ Click once on '**Generate Report**'.



Year: 1996

State: NJ

County: BERGEN

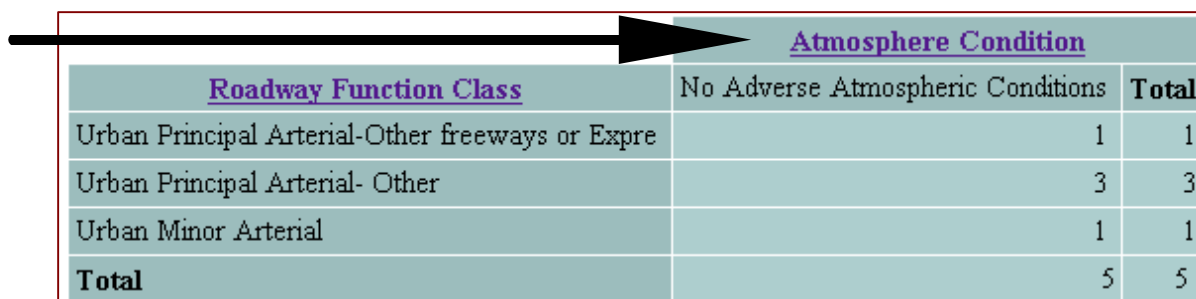
City: PARAMUS

Generate Report

Figure 8: Click once on 'Generate Report'.

10. In the left frame of the **Report Query Page**, the queried data is presented in table format, and user selections (**Year, State, County, City**) are displayed.

Roadway Function Class and **Atmosphere Condition** are the variables defining this table.



<u>Roadway Function Class</u>	<u>Atmosphere Condition</u>	
	No Adverse Atmospheric Conditions	Total
Urban Principal Arterial-Other freeways or Expre	1	1
Urban Principal Arterial- Other	3	3
Urban Minor Arterial	1	1
Total	5	5

Figure 9: Table format of queried data.

Display Preferences Option:

11. Use the **Display Preferences** buttons on the lower right side of the screen to view the table in another format.



Note: The Display Preferences option alters the table's format, not the data.

12. To change the Display Preferences:

- Click once on the 'Yes' button in **Display Zero Values**.
- Click once on '**Generate Report**'.

DISPLAY PREFERENCES

Display Column Names ☒ Yes ☐ No

Display Zero Values ☒ Yes ☐ No




Figure 10: Click once on 'Yes' in the Display Preferences box.

13. This produces a table with zero values displayed in every row and column.

Rural Principal Arterial-Interstate	0	0	0	0	0	0	0	0	0
Rural Principal Arterial, Other	0	0	0	0	0	0	0	0	0
Rural Minor Arterial	0	0	0	0	0	0	0	0	0
Rural Major Collector	0	0	0	0	0	0	0	0	0
Rural Minor Collector	0	0	0	0	0	0	0	0	0
Rural Local Road or Street	0	0	0	0	0	0	0	0	0
Unknown Rural	0	0	0	0	0	0	0	0	0
Urban Principal Arterial-Interstate	0	0	0	0	0	0	0	0	0
Urban Principal Arterial-Other freeways or Expre	1	0	0	0	0	0	0	0	0
Urban Principal Arterial- Other	3	0	0	0	0	0	0	0	0
Urban Minor Arterial	1	0	0	0	0	0	0	0	0
Urban Collector	0	0	0	0	0	0	0	0	0

Figure 11: Table with Displayed Zero Values.

14. Change the **Display Preferences** again:

- Click once on the '**No**' button in Display Zero Values.
- Click once on the '**No**' button in Display Column Names.
- Click once on '**Generate Report**'.

Coding Manual for Table Variables:

15. In the table under **Atmosphere Condition**, a '**1**' replaces the column name. To define the '**1**', we need to access the **Coding Manual**.

- Click once on the link "[Atmosphere Condition](#)".

<u>Roadway Function Class</u>	<u>Atmosphere Condition</u>	
	1	Total
Urban Principal Arterial-Other freeways or Expre	1	1
Urban Principal Arterial- Other	3	3
Urban Minor Arterial	1	1
Total	5	5

Figure 12: Table without Displayed Column Names.

16. The **Coding Manual** for **Atmosphere Condition** appears.

'1' is defined as '**No Adverse Atmosphere Conditions**'.

Code	Definition
1	No Adverse Atmospheric Conditions
2	Rain
3	Sleet(Hail)
4	Snow
5	Fog
6	Rain and Fog
7	Sleet and Fog
8	Other(Smog, Smoke, Blowing Sand or Dust)
9	Unknown

Figure 13: Coding Manual for Atmosphere Condition

17. To return to the Report Query Page:

- Click once on the '**Back**' button in the top left-hand corner of the **Web Browser Toolbar**.

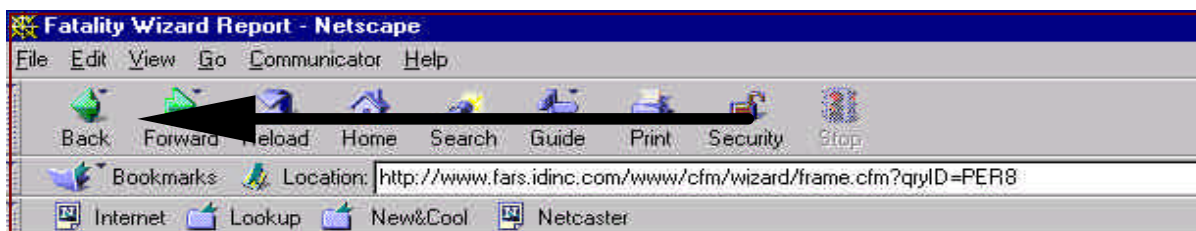


Figure 14: 'Back' button on Web Browser Toolbar.

18. The Coding Manual for Roadway Function Class is accessed in the same manner.

- Click once on the link ["Roadway Function Class"](#).

Code	Definition
1	Rural Principal Arterial-Interstate
2	Rural Principal Arterial, Other
3	Rural Minor Arterial
4	Rural Major Collector
5	Rural Minor Collector
6	Rural Local Road or Street
9	Unknown Rural
11	Urban Principal Arterial-Interstate
12	Urban Principal Arterial-Other freeways or Expre
13	Urban Principal Arterial- Other
14	Urban Minor Arterial
15	Urban Collector
16	Urban Local Road or Street
19	Unknown Urban
99	Unknown

Figure 15: Coding Manual for Roadway Function Class.

19. To return to the Report Query Page:

- Click once on the '**Back**' button in the top left-hand corner of the **Web Browser Toolbar** (See Figure 14, above).

Query Search Criteria

20. On the lower section of the left frame on the **Table Query Screen** is a section for **Query Search Criteria**.

Query Search Criteria are additional information helping clarify the variables of your search.

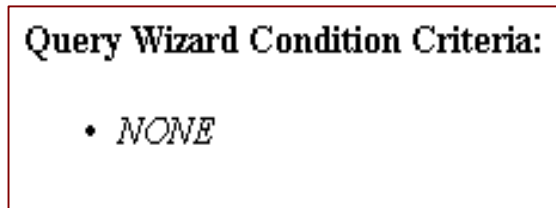


Figure 16: Query Wizard Criteria.

21. Our particular search did not command any additional clarification (For a search with **Query Criteria**, refer to “**Query Wizard: Example 3**”).

22. Our Query is complete.

QUERY WIZARD



Example 2:

Fatality Reports:

"Driver Fatalities in Collision with Trains by Alcohol Test Results"

Year: 1995 **State:** CA **County:** San Joaquin **City:** Lodi

Connect to Query Wizard:

1. To connect to the **Query Wizard** from the **FARS Home Page**:

➡ Click once on the hyperlink title "[Query Wizard](#)".

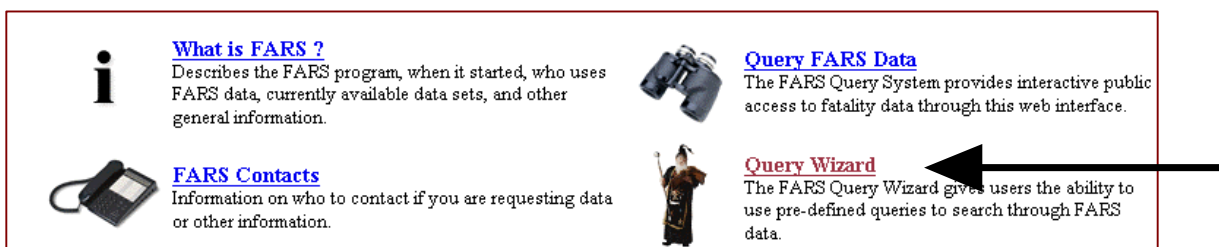


Figure 1: FARS Home Page link to Query Wizard Page.

2. On the **Query Wizard Page**, the **FARS Reports** are divided into 4 categories:

- ❖ **Accident Reports**
- ❖ **Vehicle Reports**
- ❖ **Driver Reports**
- ❖ **Fatality Reports**

Under each category are hyperlink titles of reports that connect to the **Report Query Page**.

3. To begin a query, click once on the hyperlink title of the report you want to review.
➡ Under "**Fatality Reports**", click once on the hyperlink, "[Driver Fatalities in Collision with Trains by Alcohol Test Results](#)" (See Figure 2, page 13).

Fatality Reports	
1. Total Fatalities by Posted Speed Limit and Rural vs. Urban	
2. Total Fatalities Involving Emergency Vehicles by Type of Emergency Vehicles and Emergency in Use	
3. Total Fatalities in Crashes Involving Large Trucks by State	
4. Occupant Fatalities in Passenger Vehicles by Restraint Use	
5. Occupant Fatalities in the Beds of Pickups by State and Age	
6. 0-4 Years-Old Occupant Fatalities in Passenger Vehicles by Restraint Use	
7. Driver Fatalities by Person Sex and BAC	
8. Driver Fatalities in Collision with Trains by Alcohol Test Results	←
9. Pedestrian Fatalities by State and BAC	

Figure 2: Link to “Driver Fatalities in Collision with Trains by Alcohol Test Results”.

4. The Report Query Page is divided into two frames:

In the right frame are drop-down boxes with search criteria and radio buttons to select **Display Preferences**.

In the left frame is the title of your query, and where the queried data will appear.

Figure 3: Report Query Page.

Select Year to Query:

5. Begin on the right side of the screen:

- Click once on the arrow of the first drop-down box.
- Scroll the year options.
- Click once on '1995'.



Note: At this time, only the years 1994, 1995, 1996 and 1997 can be queried.

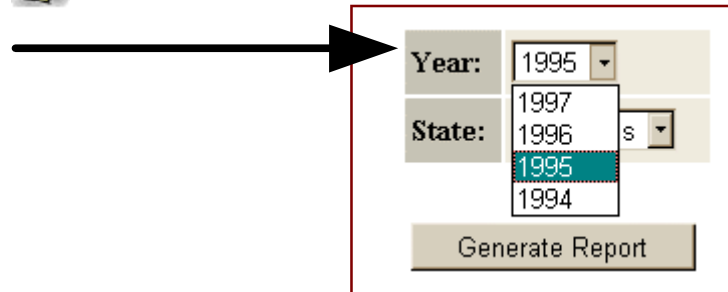


Figure 4: Click once on '1995'.

Select State to Query:

6. Choose a state to query:

- Click once on the arrow of the second drop-down box.
- Scroll through the state options.
- Click once on 'CA' for California.



Note: If an 'All States' query is chosen, no further drop-down boxes will appear, and you can skip to step 9.

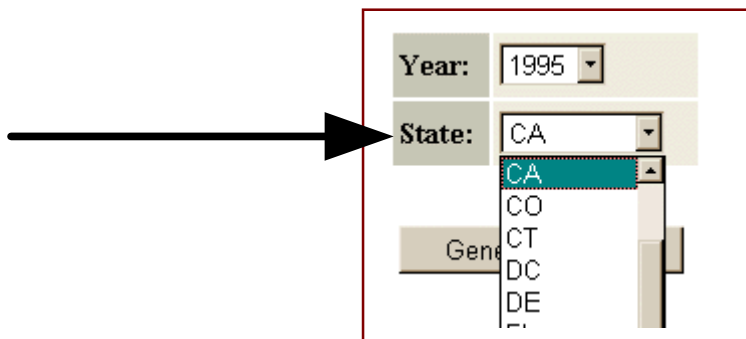


Figure 5: Click once on 'CA'.

Select County to Query:

7. A third drop-down box with county choices will appear:

- Click once on the arrow of the third drop-down box.
- Scroll through the county options.
- Click once on '**San Joaquin (77)**'.



Note: If an 'All Counties' query is chosen, no further drop-down boxes will appear, and you can skip to step 9.

The screenshot shows a form with three dropdown boxes: Year (1995), State (CA), and County. The County dropdown is open, showing a list of counties. An arrow points to the County dropdown box. The list of counties includes: SAN JOAQUIN(77), SAN LUIS OBISPO(79), SAN MATEO(81), SANTA BARBARA(83), and SANTA CLARA(85). The option SAN JOAQUIN(77) is highlighted in blue.

Figure 6: Click once on 'San Joaquin(77)'.

Select City to Query:

8. A fourth, final drop-down box with city choices will appear:

- Click once on the arrow of the fourth drop-down box.
- Scroll through the city choices.
- Click once on '**Lodi**'.

The screenshot shows the same form as Figure 6, but now with a fourth dropdown box for City. The City dropdown is open, showing a list of cities. An arrow points to the City dropdown box. The list of cities includes: LODI. The option LODI is highlighted in blue. Below the dropdown boxes is a button labeled 'Generate Report'.

Figure 7: Click once on 'Lodi'.

Generate Report:

9. You are now ready to generate the report.

➡ Click once on '**Generate Report**' (See Figure 7, page 15).

10. A message - "**No Records Found Matching Specified Criteria**" appears.

The fields chosen did not produce any data.

Redo the search.



Figure 8: "No Records Found matching Specified Criteria" message.

Redo Search:

11. Go back to the choices on the right and change the **Year, State, County, or City** options.

➡ Click once on '**All Cities**'.



Note: An 'All States', 'All Cities', or 'All Counties' search will produce greater results than a singular choice.

A screenshot of a search criteria form. It contains four dropdown menus: 'Year' (set to 1995), 'State' (set to CA), 'County' (set to SAN JOAQUIN(77)), and 'City' (set to All Cities). A black arrow points to the 'City' dropdown. Below the dropdowns is a 'Generate Report' button. The entire form is enclosed in a red rectangular border.

Figure 9: Click once on 'All Cities'.

12. You are now ready to generate the report.

➡ Click once on '**Generate Report**' (See Figure 7, page 15).

13. On the left side of the **Report Query Screen**, the queried data is presented in **Table Format** or **Bar Chart Format** .

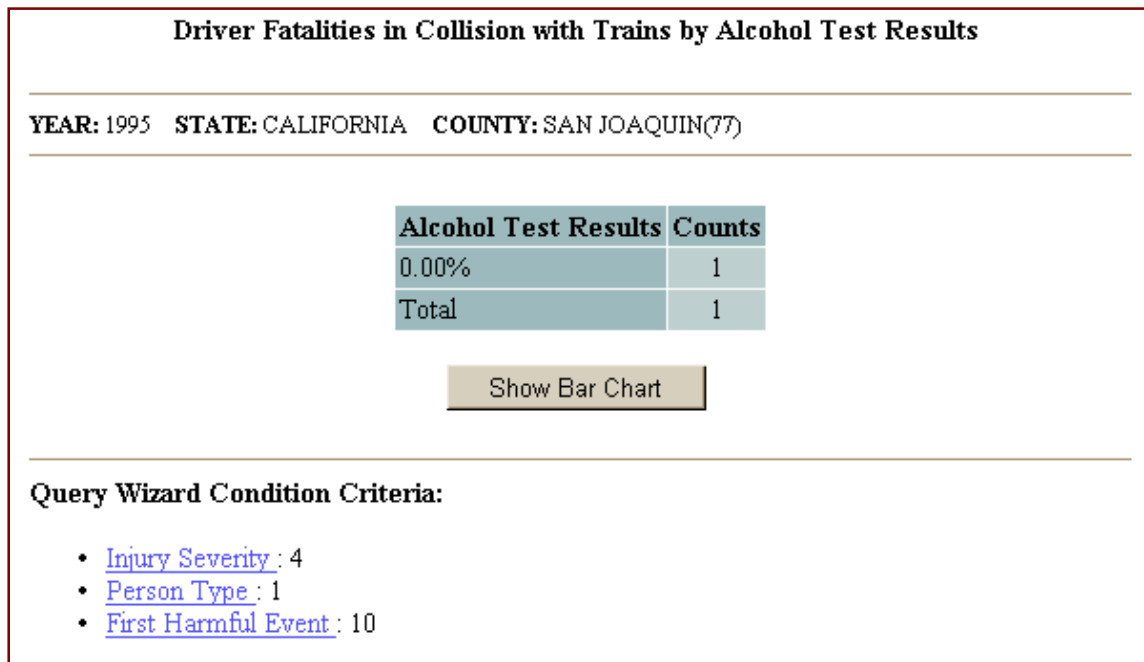


Figure 10: Queried data in Table Format.

14. Our query is complete.

QUERY WIZARD



Example 3:

Driver Report:

"Drivers Involved when Driver-Related Factor was Speeding by Alcohol Test Results"

Year: 1996 **State:** FL **County:** Palm Beach **City:** Boca Raton

1. To connect to the **Query Wizard** from the **FARS Home Page**:

➡ Click once on the hyperlink title "[Query Wizard](#)".





 What is FARS ? Describes the FARS program, when it started, who uses FARS data, currently available data sets, and other general information.	 Query FARS Data The FARS Query System provides interactive public access to fatality data through this web interface.
 FARS Contacts Information on who to contact if you are requesting data or other information.	 Query Wizard The FARS Query Wizard gives users the ability to use pre-defined queries to search through FARS data.

Figure1: FARS Home Page link to Query Wizard Page.

2. On the **Query Wizard Page**, the **FARS Reports** are divided into 4 categories:

- ❖ **Accident Reports**
- ❖ **Vehicle Reports**
- ❖ **Driver Reports**
- ❖ **Fatality Reports**

Under each category are hyperlink titles of reports that connect to the **Report Query Page**.

3. To begin a query, click once on the hyperlink title of the report you want to review.

➡ Under "**Driver Reports**", click once on the hyperlink, "[Drivers Involved when Driver-Related Factor was Speeding by Alcohol Test Results](#)" (See Figure 2, page 4).



Figure 2: Link to “Drivers Involved when Driver-Related Factor was Speeding by Alcohol Test Results”.

4. The **Report Query Page** is divided into two frames:
- In the right frame are drop-down boxes with search criteria and radio buttons to select **Display Preferences**.
 - On the left is the title of your query, and where the queried data will appear.

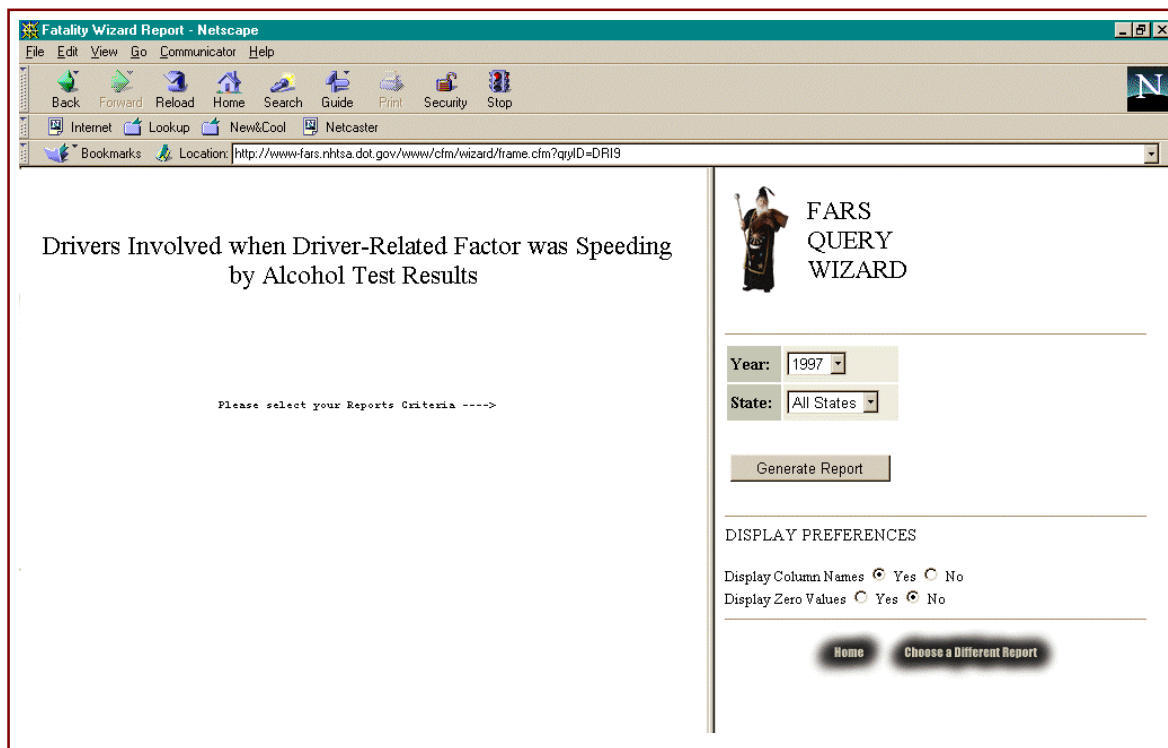


Figure 3: Report Query Page.

Choose a Year to Query:

5. Begin on the right side of the screen:

- Click once on the arrow of the first drop-down box.
- Scroll the year options.
- Click once on '**1996**'.



Note: At this time, only the years 1994,1995,1996 and 1997 can be queried.

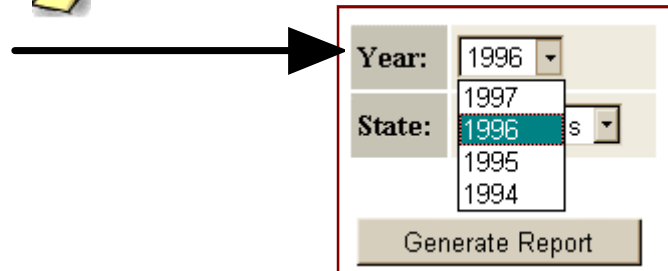


Figure 4: Click once on '1996'.

Choose a State to Query:

5. Choose a state to query:

- Click once on the arrow of the second drop-down box.
- Scroll through the state options.
- Click once on '**FL**' for **Florida**.



Note: If an 'All States' query is chosen, no further drop-down boxes appear, and you can skip to Step 9.

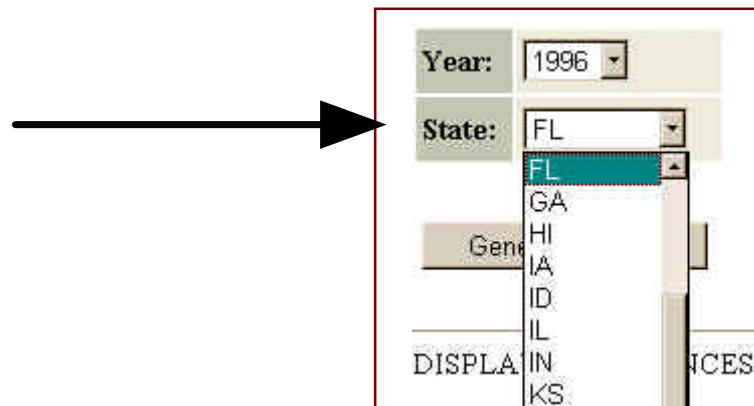


Figure 5: Click once on 'FL'.

Choose a County to Query:

6. Choose a county to query:

- Click once on the arrow of the third drop-down box.
- Scroll through the county options.
- Click once on '**Palm Beach(99)**'.



Note: If an 'All Counties' query is chosen, no further drop-down boxes appear, and you can skip to Step 9.

The screenshot shows a web form with three dropdown menus: 'Year' (set to 1996), 'State' (set to FL), and 'County'. The 'County' dropdown is open, displaying a list of options: PALM BEACH(99), ORANGE(95), OSCEOLA(97), PALM BEACH(99) (highlighted in blue), PASCO(101), and PINELLAS(103). A black arrow points to the 'County' dropdown, and a yellow arrow points to the 'PALM BEACH(99)' option in the list.

Figure 6: Click once on 'Palm Beach(99)'.

Choose a City to Query:

7. A fourth, final drop-down box will appear:

- Click once on the arrow of the fourth drop-down box.
- Scroll through the city options.
- Click once on '**Boca Raton**'.

The screenshot shows the same web form as Figure 6, but now with a fourth dropdown menu, 'City', which is open and showing 'BOCA RATON'. A black arrow points to the 'City' dropdown, and a yellow arrow points to the 'BOCA RATON' option. Below the dropdowns is a 'Generate Report' button.

Figure 7: Click once on 'Boca Raton'.

Generate Report:

9. You are ready to generate the report.

➡ Click once on '**Generate Report**' (See Figure 7, page 21).

10. For this report, the data is represented in both table(Figure 8) and bar chart formats (Figure 9, below).

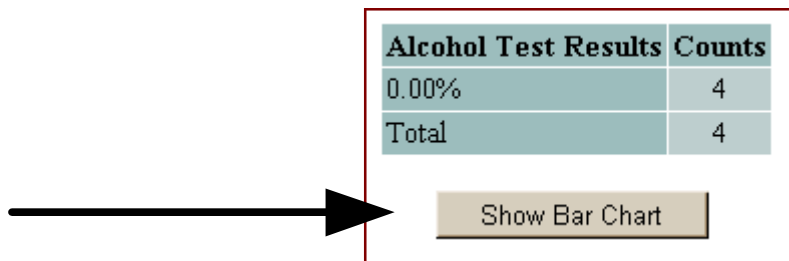


Figure 8: Table format of queried data.

View Data in Bar Chart Format:

11. To view the bar chart:

➡ Click once on '**Bar Chart**' (See Figure 8, above).

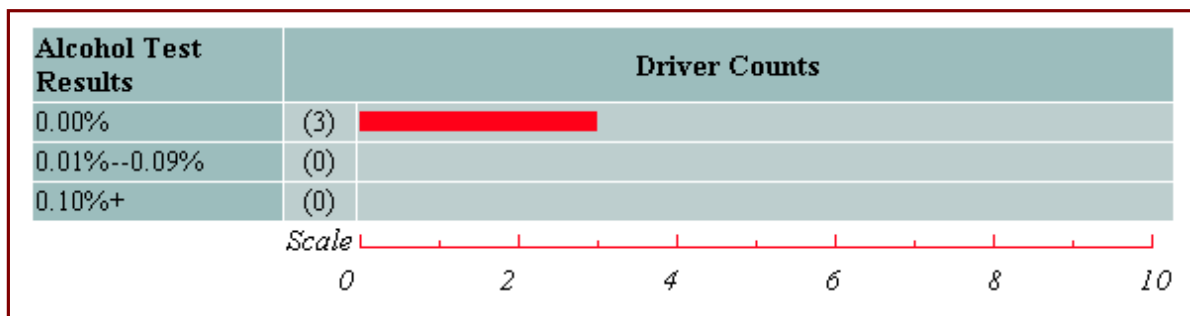


Figure 9: Bar Chart format of queried data.

12. To return to the **Report Query Page** to view the data in table format:

➡ Click once on the '**Back**' button in the top left-hand corner of the **Web Browser Toolbar** (See Figure 10, page 23).

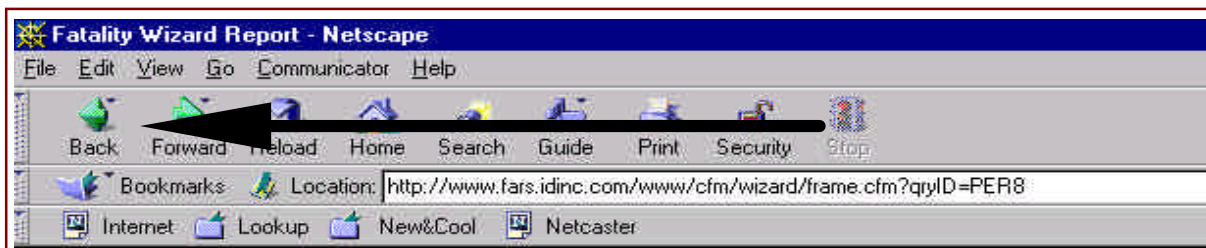


Figure 10: 'Back' button on the Web Browser Toolbar.

Display Preferences:

13. You also have the option to view the table in another format using the **Display Preferences** buttons on the lower right side of the screen (See "**FARS Query Wizard Exercise:1**" for a detailed explanation of this option).



Note: The Display Preferences option alters the table's format, not the data. Also, the Display Preferences buttons have no affect on the Bar Chart.

DISPLAY PREFERENCES

Display Column Names ☒ Yes ☐ No

Display Zero Values ☐ Yes ☒ No

Figure 11: Display Preferences Box.

Query Wizard Condition Criteria:

14. Beneath the table/bar chart is **Query Wizard Condition Criteria**.

Query Wizard Condition Criteria are factors that characterize the accident: the vehicles, the surrounding circumstances (such as weather or road conditions), and the people involved.

Query Wizard Condition Criteria:

- Person Type : 1
- Related Factors-Driver : 44

Figure 12: Query Wizard Condition Criteria.

15. Our search contained two criteria (See Figure 12, page 23).
Person Type defines the type of driver involved.
Related Factors-Driver defines the circumstances of the driver's actions.

Coding Manual:

16. Each listed criteria is a hyperlink to a corresponding **Coding Manual**.

➤ Click once on the link "[Person Type](#)".

In the **Coding Manual** for **Person Type**, '1' is defined as '**Driver of a Motor Vehicle in Transport**'.

Code	Definition
1	Driver of a Motor Vehicle in Transport
2	Passenger of a Motor Vehicle in Transport
3	Occupant of a Motor Vehicle Not in Transport
4	Occupant of a Non-Motor Vehicle Transport Device
5	Pedestrian
6	Bicyclist
7	Other Cyclist
8	Other Pedestrians
9	Unknown Occupant Type in a Motor Vehicle in Transport
19	Unknown Type of Non-Motorist
99	Unknown Person Type

Figure 12: Coding Manual for PersonType.

17. Return to the **Report Query Page**.

➤ Click once on the '**Back**' button in the top left-hand corner of the **Web Browser Toolbar** (See Figure 10, page 23).

18. To access the **Coding Manual for Related Factors - Driver**:

➤ At the **Report Query Page**, left click once on "[Related Factors - Driver](#)".

Reading the **Coding Manual for Related Factors - Driver**, '44' is '**Driving too fast for Conditions or in Excess of posted Maximum**' (See Figure 13, page 24).

	Failing to Yield to Overtaking Vehicle
36	Operating the Vehicle in an Erratic,Reckless,Careless or Negligent Manner; Operating at Erratic/Suddenly Changing Speeds
37	Police Pursuing this Driver or Police Officer in Pursuit
38	Failure to Yield Right of Way
39	Failure to Obey Actual Traffic Sign,Traffic Control Devices or Traffic Officers;Failure to Obey Safety Zone Traffic Laws
40	Passing Through or Around Barrier
41	Failure to Observe Warnings or Instructions on Vehicles Displaying Them
42	Failure to Signal Intentions
43	Giving Wrong Signal
44	Driving too Fast for Conditions or in Excess of Posted Maximum
45	Driving Less than Posted Minimum

Figure 13: Coding Manual For Related Factors - Driver.

19. Return to the Report Query Page:

- ➡ Click once on the '**Back**' button in the left-hand corner of the **Web Browser Toolbar** (See Figure 10, page 23).

20. Our Query is complete.